

# **ECOMIX**

WATER
TREATMENT
SYSTEMS



**O&M MANUAL** 

**CLACK WS1** 

# **THANK YOU**

Thank you for your purchase of an **ECOMIX** water treatment system.

We advise that this system is connected by a professional plumber or installer.

# **ABOUT ECOMIX**

If your water leaves stains, tastes odd, or causes buildup in your appliances, you're not alone. Many homes face issues like iron, manganese, hardness, or organic matter in their water supply — and fixing them doesn't have to be complicated.

**ECOMIX** is a smart, all-in-one filtration media designed to treat multiple water problems at once. Instead of installing separate filters for each issue, **ECOMIX** blends several treatment components into a single system. As water flows through, it's cleaned, softened, and improved — giving you clearer water, better taste, and longer-lasting appliances.

Whether your water comes from a well or a municipal source, **ECOMIX** adapts to a wide range of conditions. It's easy to install, simple to maintain, and built to deliver reliable results over time. From drinking and cooking to bathing and laundry, **ECOMIX** helps make everyday water safer and more enjoyable.



# **QUICK INSTALLATION CHECKLIST**

- The installation site should be on a flat, level surface in a frost-free environment.
- Water pressure requirement is a minimum of 2.0 bar maximum of 5.0 bar.
- Access to a drain, that is open, level and accessible.

## **COMPONENTS**



# 1.0 VESSEL ASSEMBLY

- Place the vessel [1] on a level, flat surface in its final placement, or as closely as possible.
- Take the riser tube [7] and place it inside the vessel, "basket-end" first.
- You will feel the basket nestle into the dip at the centre of the vessels base.
- The riser tube opening should sit level with the top of the tank.
- If the tube is sitting proud, then the tube is not seated correctly.

# 2.0 ADDING THE MEDIA

Fill the vessel [1] around 20% - 30% with water.

This is to help protect the riser-basket [7] and the inner-vessel [1] from scoring when the media [6] is poured in.

Cap-off the top opening of the riser tube using a media funnel (taping over the opening should be sufficient) as it is **important that NO media enters the tube**.



Please read the Media Safety Datasheet before installing any of our water treatment systems.

Scan the QR Code or visit: https://pumpexpress.co.uk/media-safety-datasheets/



Media Safety Datasheets



Pour the media [6] into the gap between the riser tube [7] and "lip" of the tank.

**STOP** pouring when the media reaches around two-thirds of the tank capacity. Once the media is filled, tap the tank on the floor a few times to agitate the media into a more compressed state cavities in the media bed can lead to insufficient treatment.

**DO NOT FILL THE VESSEL FULLY WITH MEDIA** – this will drastically reduce system efficiency

# 3.0 INSTALLING THE CLACK VALVE

The valves are preset for backwashing to begin at 2am, all **ECOMIX** treatments are preset to treat water of 300 hardness.

Assemble the inlet & outlet valves [9] as per the diagram below, or the instructions provided with the valves labelled "3007-06".







When the valves [9] are assembled, align each squarely, with the ring end first into the inlet or outlet ports on the valve, securely hand tighten.



(DO NOT over tighten, and take care NOT to cross thread).

Take the Clack Distributor-Basket [10] and attach it to the underside of the Clack-Valve [8], inserting the wider end first.

This will connect via a bayonet-connection, so it will need a partial twist to secure it into place.





## 4.0 CONNECTING THE CLACK VALVE TO THE VESSEL

Carefully, position the Clack Valve [8] above the vessel [1] - Aligning the Distributor-Basket [10] opening with the riser tube [7].

Ensuring the alignment, gently, push the Clack-valve downwards, inserting the riser tube into the distributor basket, until the Clack head meets the thread of the vessel.

Steadily rotate the assembled Clack valve, securing it to the thread of the vessel, (ensuring not to cross thread) until it is hand-tight (DO NOT over tighten).





#### **5.0 BRINE TANK ASSEMBLY**

Place the Brine tank grid [4] "smooth-side" down on a flat, clean surface.

Take the supplied "feet" and carefully, tap them into place in the 4 smaller-holes in the grid. You should feel them locking into place.

Place the assembled Brine Grid feet first into the Brine Tank [2], feet-first.





Insert the Brine Well [3] (large diameter tube) and push into the remaining hole in the Brine-Grid [4] ensuring that the push-connector of the brine well is at the top. (Fig1).

FIG 1





Position the Push-fit connector in the direction you wish to feed the brine hose [11] out of the tank.

**TIP:** position the Brine tank so you can connect the pipe through to the Brine Well at the shortest point, having as little brine hose in the tank as possible will make filling the tank easier. (Fig 2).

Mark the push-connection site onto the tank [2] and carefully, drill a **10mm** hole, to enable the brine hose [11] to pass-through and push the hose into the push fit connector of the brine well [3] (Fig3).





3 FIG 4

An overflow adaptor is provided [5]. Decide on a location on the brine tank for the overflow point to

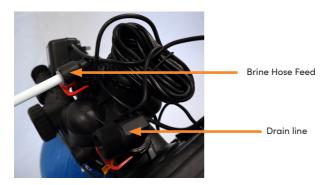
be positioned. Ideally it should be positioned closest and directed towards the drain. Carefully drill a

**20mm** hole towards the top of the tank then connect the overflow (Fig 4).



# **6.0 CONNECT THE TANK TO THE VESSEL**

Insert the free-end of the brine-hose [11] into the Brine-hose Feed valve on the top of the WS1 Clack Valve [8] (Below) with the fixtures facing you, insert the hose into the left hand valve.



#### Connecting the drain line

The drain line should be plumbed in to the nearest drain. We suggest using the following items. These are not included.

1 x 3/4" stainless steel socket

1 x 3/4 to 1/2" stainless steel reducing bush

½" pipe to drain

**BUILD COMPLETE!** Your unit is now ready to be connected to you water supply and powered up!

## **SPECIFICATION**

Size of Vessel	Service Flow Rate		Ecomix Volume	System Capacity	Salt per	Backwash Flow Rate	
	m³/hr	Lpm	(Bags)	(m³) *	Regen [KGs]	m³/hr	Lpm
10x54	1.3	21.66	1.5	5.6	3.7	0.73	12.11
12x48	1.8	30.00	2	7.5	5	0.95	15.89
13x54	2.2	36.66	2.5	9.3	6.2	1.20	20.06
14x65	2.5	41.66	3	11.3	7.5	1.48	24.60
16x65	3.3	55.00	4	15	10	1.70	28.39
18x65	4.3	71.66	5.5	20	13.7	2.27	37.85
21x62	5.5	91.66	6	22.5	15	2.73	45.42

m3/hr - Cubic Metres Per Hour

Lpm - litres per minute

\*Calculated at 200ppm Hardness



## **MORE RESOURCES**

Please scan QR codes for further helpful resources, and trouble shooting.

Please read the safety datasheet before installing any of our water treatment systems.



Media Safety Datasheets

# WARRANTY

This product is guaranteed for the period of one year from the date of purchase against mechanical and/or electrical defects. This guarantee is only valid if the unit has been installed and used in accordance with these instructions.

# **SET YOUR WATER HARDNESS**

Please note Duplex Softeners come pre-programmed.

Press "Set Clock" button - hours will flash. Use up and down buttons to set hours

- 1. Press "Next" button, set minutes and press "Next"
- 2. Press "Next" and "Up" buttons together and hold until screen changes
- Set hardness based on raw water hardness of water supply (from water analysis or test on site)
- 4. Press "Next". Leave next setting at 2 0
- 5. Press "Next". Set the day override (preset at 4)

Press "Next". Set the regeneration time (preset at 2am)



Pump Express Website

# **FULL PROGRAMMING GUIDE**

# User settings (NEXT & UP together for 3 seconds)

Set hardness

Set hardness 2 (zero unless using a mixing valve)

Set day override

Set regeneration time (only for simplex)

# OEM programming level 2 (NEXT & DOWN for 3 seconds then repeat)

Set valve size - 1t

Set to "OFF" the option to use ALT valve

Set to "DP OFF" (not using differential pressure switch)

Set ppm (units of hardness measurement)

Set stage 1 to BACKWASH

Set stage 2 to BRINE

Set stage 3 to RINSE

Set stage 4 to FILL

Set stage 5 to END

# OEM programming level 1 (NEXT & DOWN for 3 seconds)

Set to SOFTENING

Set backwash time using above table

Set the brine time using the table above

Set rinse time using table above

Select the fill using table above (in KG)

Set the system capacity using the table above

Set the capacity to AUTO

Set the regen time to On O

Set relay 1 to OFF

Set relay 2 to OFF

Set SALT to OFF (no salt monitor being used)

